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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,831	05/04/2001	Billy R. Masten		2256
7590	05/06/2004		EXAMINER	
Dorsey L. Baker			EVANS, FANNIE L	
4603 Eleventh Street				
Lubbock, TX 79416			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/849,831	MASTEN, BILLY R.
	Examiner	Art Unit
	F. L. Evans	2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 December 2003 and 12 January 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-45 and 47-53 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-4,10,11,13-15,18-20,25,27,35-45,47-49 and 51-53 is/are allowed.
- 6) Claim(s) 5,7,12,16,21,22,24,33,34 and 50 is/are rejected.
- 7) Claim(s) 6,8,9,17,23,26 and 28-32 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Objections

Claims 17 and 26 are objected to under 37 CFR § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 17 fails to further limit the subject matter of a previous claim because claim 17 depends from claim 17. Claim 26 fails to further limit the subject matter of claim 24 because it is a duplicate of claim 24. Applicant is required to cancel the claim, or amend the claim to place it in proper dependent form.

Claims 8, 9 and 28-32 are object to in that text is missing from line 5 of claims 8 and 28. It appears that --and-- should be inserted between “lens” and “diffraction” in line 5 of claims 8 and 28. See lines 4 and 5 on page 6 and lines 1 and 2 on page 13 of the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 50 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The lack of an antecedent for “micro processor” bridging lines 1 and 2 of claim 12 and “said array” in line 2 of claim 50 renders claims 12, 50 and any claim dependent therefrom indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form

the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5, 7, 16, 21, 22 and 24 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Barwicz et al (US 6,002,479), newly cited.

With respect to claims 5, 7, 21, 22 and 24, Barwicz et al disclose a low cost, high speed spectral sensing method capable of collecting and wirelessly transmitting spectral information on the physical condition of an object comprising the steps of sensing the spectral distribution of a plurality of segments of wavelengths of light reflected by an object with a portable spectral apparatus; electronically measuring the magnitude of the segments of reflected wavelengths and wirelessly transmitting the spectral distribution to a remote memory.

With respect to claim 16, Barwicz et al disclose a low cost, lightweight apparatus for accumulation and wireless transmission of a wide spectral distribution of an object comprising a sensors array means (photodiodes) for accumulating a plurality of charges and a controller means (specialized digital processor) for directing the plurality of charges to a port for wireless transmission to a remote analysis device.

Applicant's attention is directed to Barwicz et al in its entirety with particular attention directed to the paragraph bridging columns 3 and 4, lines 15-25 of column 4, lines 1-29 of column 5, lines 6-55 of column 9, lines 45 and 46 of column 16, lines 34-43 of column 20 and Figs. 5, 8 and 9.

Claims 33 and 34 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Kelderman et al (US 4,844,617), of record.

Kelderman et al disclose an apparatus for obtaining a spectral distribution of an object comprising a sensing unit (44, 50, 52) for receiving reflected light (48) and having a diffraction device (50) for separating the reflected light into segmented wavelengths; a linear array (52) mounted in the path of the diffracted light; a target light means (58) positioned adjacent to the sensing unit for emitting light upon the source of the reflected light for aiming the sensing unit at the object. The target light is directed in the opposite direction of the reflected light. See Fig. 10 and the text pertaining thereto in the paragraph bridging columns 8 and 9 and lines 14-27 of column 10.

Additional Prior Art

Kovacs et al (US 5,833,603) disclose a spectrophotometer with means for wirelessly transmitting spectral data. See Fig. 5 and the text pertaining thereto.

Allowable Subject Matter

Claims 1-4, 10, 11, 13-15, 18-20, 25, 27, 35-45, 47-49 and 51-53 are allowed over the prior art of record.

Claims 8, 9 and 28-32 would be allowable if rewritten to overcome the objections set forth above.

Claims 12 and 50 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 set forth above.

Claims 6 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 5, 7, 16, 21, 22 and 24 have been considered but are moot in view of the new grounds of rejection.

Applicant's arguments and amendments, filed on December 21, 2003 and January 12, 2004, with respect to claims 8-15, 8-18-20, 25, 27-32, 35-45 and 47-53, have been fully considered and are persuasive.

Applicant's arguments with respect to claims 33 and 34 have been fully considered but are not persuasive. Target light means 58 of Kelderman et al is used to aim the sensing unit (44, 50, 52) at the object whose spectral distribution being sought. In general, aiming can be achieved by either moving the object relative to the sensing unit or moving the sensing unit relative to the object. The claims do not set forth structure that distinguishes over that of Kelderman et al.

Comments

With respect to Form PTO-326 of Paper No. 9, claims 5, 6, 8, 10-16 and 18-53 were not subject to restriction and/or election requirement (item 8). Claims 5, 6, 8, 10-16 and 18-53 were rejected (item 6). Item 6 is a typographical error.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Fax/Telephone Numbers

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax number for Technology Center 2800 is (703) 872-9306 for regular and After Final communications.

If applicant wishes to send a fax containing a Proposed Amendment for discussion during either a personal interview or a telephone interview then the fax should:

- 1) Contain either the statement "**DRAFT**" or "**PROPOSED AMENDMENT**" on the Fax Cover Sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that the amendment will not be entered into the application and will be forwarded to the examiner as quickly as possible.

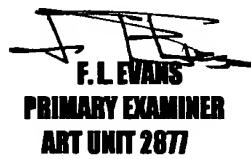
Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (571) 272-2415. The TC Receptionist's telephone number is (571) 272-1562.

Any other inquiry of a technical nature, and all inquiries of a general nature including those relating to the status of an application should be directed to TC 2800 Customer Service Office whose telephone number is (571) 272-1585.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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May 1, 2004